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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,108	06/27/2001	Anna L. Buczak	H000142 (M&G 13358.11USU1	4900
23552 73	590 06/04/2004		EXAMI	NER
MERCHANT & GOULD PC P.O. BOX 2903			DAVIS, GEORGE B	
	IS, MN 55402-0903		ART UNIT	PAPER NUMBER
			2121	
			DATE MAILED: 06/04/2004	$\phi$

Please find below and/or attached an Office communication concerning this application or proceeding.

4

Office Action Summary					
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948	☐ Other				
Notice of Reference(s) Cited, PTO-892	☐ Notice of Informal Patent Application, PTO-152				
Information Disclosure Statement(s), PTO-1449, Paper No(s).					
Attachment(s)	•				
*Certified copies not received:	•				
<ul> <li>□ received in Application No. (Series Code/Serial Number)</li> <li>□ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).</li> </ul>					
<ul> <li>□ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).</li> <li>□ All □ Some* □ None of the CERTIFIED copies of the priority documents have been</li> <li>□ received.</li> </ul>					
Priority under 35 U.S.C. § 119 (a)-(d)					
☐ The oath or declaration is objected to by the Examiner.					
☐ The specification is objected to by the Examiner.					
☐ The drawing(s) filed on is/are objected to by the Examiner.					
☐ The proposed drawing correction, filed on is ☐ approved ☐ disapproved.					
☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.					
Application Papers	requirement.				
□ Claim(s)—	are subject to restriction or election				
□ Claim(s)					
Claim(s) 1-54	is/are rejected.				
☐ Claim(s)	is/are allowed.				
Of the above claim(s)	is/are withdrawn from consideration.				
Disposition of Claims  Claim(s)	is/are pending in the application.				
☐ Since this application is in condition for allowance except for formal accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 1 1					
☐ This action is FINAL.	matters procession as to the marite is sleered in				
☐ Responsive to communication(s) filed on					
Status					
<ul> <li>Extensions of time may be available under the provisions of 37 CFR 1.136(a). In n from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days, a reply within the If NO period for reply is specified above, such period shall, by default, expire SIX (Failure to reply within the set or extended period for reply will, by statute, cause the</li> </ul>	e statutory minimum of thirty (30) days will be considered timely. 6) MONTHS from the mailing date of this communication .				
OF THIS COMMUNICATION.					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE	MYEE MONTH(S) FROM THE MAILING DATE				
Period for Reply	TT ( )				
—The MAILING DATE of this communication appears on the	cover sheet beneath the correspondence address				
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Office Action Summary Evaning	893108 134 CLak etal				
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U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)

\*U.S. GPO: 1997-433-221/62717

Part of Paper No.

Application/Control Number: 09/893108

Art Unit: 2121

#### **DETAILED ACTION**

#### Claim Objections

1. Claims 1-54 are objected to because of the following informalities:

Claims 1 and 16, line 7, after "population;" insert -- and --.

Claim 27, line 10, delete "and".

Claim 27, line 19, after "individual;" insert -- and --.

Claim 28, line 2, delete "a number, N of" and insert -- N --.

Claim 28, line 11, after "population;" insert -- and --.

Claim 28, line 18, after "individual" insert --; and --.

Claim 43, line 2, delete "a number, N of" and insert -- N --.

Claim 43, line 11, after "population;" insert -- and --.

Claim 43, line 19, after "n-1;" insert -- and --.

Claim 54, line 2, delete "a number, N of" and insert -- N --.

Claim 54, line 13, delete -- and --.

Claim 54, line 22, after "mutation" insert --; and --.

Claim 54, line 24, after "met;" insert -- and --.

Appropriate correction is required.

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### Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns,"

"The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because the abstract exceeds 150 words. Correction is required. See MPEP § 608.01(b).

## Claim Rejections - 35 U.S.C. § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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Claims 1-54 are rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter. Claims 1-54 recite mathematical algorithm without any limitation

to a practical application. Therefore, the claimed invention is directed to non-statutory subject

matter.

5. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to George Davis whose telephone number is (703) 305-3891. The examiner

can normally be reached on Monday through Thursday from 8:00 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Anthony Knight, can be reached on (703) 308-3179. The fax phone number for the

organization where this application or proceeding is assigned is (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

May 30, 2004

GEORGE B. DAVIS

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**PRIMARY PATENT EXAMINER**